

Ivan Valbusa

The
fontsize
package

v0.5 – 2021/01/31

Legalese

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Feedback

If you have any questions, feedback or requests please email me at `ivan dot valbusa at gmail dot com`. If you need specific features not already implemented, remember to attach the example files.

User's guide to fontsize

A small package to change the font size

v0.5 – 2021/01/31

Ivan Valbusa

ivan dot valbusa at gmail dot com

Abstract

The `fontsize` package allows you to set arbitrary sizes for the main font of the document and to adjust the line spacing accordingly. You can also generate your own `.clo` file for better tuning.

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Credits

The code is an excerpt of the `scrxextend` and `scrfontsizes` packages (Neukam et al. 2020), with few minor changes to make it completely independent of the KOMA-script bundle and with a couple of new features. The package is updated to version 3390 2019-11-18 17:09:35Z of the `scrkernel-fonts.dtx` file.

Caveat

Although effective with any value for the $\langle fontsize \rangle$ (as long as the font is scalable), the package is meant for small font size changes. For truly optimal results you should (re)define your own `.clo` file. Indeed note that the file generated with `\generateclovefile`, as well as the macros redefined via `\changefontsize`, are a subset of the standard `.clo` files.

1 Usage

The package can be loaded, as usual, with:

```
\usepackage[ $\langle options \rangle$ ]{fontsize}
```

1.1 Options

`fontsize` = $\langle fontsize \rangle$ default: 10pt

Sets the normal size to $\langle fontsize \rangle$ and the normal line spacing to $1.2\langle fontsize \rangle$. The other sizes (`\tiny`, `\scriptsize`, `\small`, ecc.) and line spacings are set proportionally. You can use any unit recognized by T_EX and you can omit the unit as well (in which case it defaults to pt). If a file named $\langle name \rangle\langle fontsize \rangle.clo$ exists it is used to setup the font sizes. This file can be generated through the `\generateclofile` command (see below).

`cloname` = $\langle name \rangle$ default: custom

Sets to $\langle name \rangle$ the name prefix of the `.clo` file generated by `\generateclofile` (see below).

1.2 Commands

`\changefontsize`[$\langle baselineskip \rangle$][$\langle fontsize \rangle$] iff $\langle baselineskip \rangle \geq \langle fontsize \rangle$

Sets the normal size to $\langle fontsize \rangle$ and the normal line spacing to $\langle baselineskip \rangle$. The other sizes (`\tiny`, `\scriptsize`, `\small`, ecc.) and line spacings are set proportionally. If the first optional argument is omitted the command has the same effect of the `fontsize` option. You can use any unit recognized by T_EX and you can omit the unit as well (in which case it defaults to pt). For example:

```
\changefontsize[13.5pt]{11.5pt}
```

`\generateclofile`{ $\langle name \rangle$ }[$\langle baselineskip \rangle$][$\langle fontsize \rangle$] iff $\langle baselineskip \rangle \geq \langle fontsize \rangle$

Generates a file named $\langle name \rangle\langle fontsize \rangle.clo$ in which the normal size is $\langle fontsize \rangle$ and the normal line spacing is $\langle baselineskip \rangle$. The other sizes (`\tiny`, `\scriptsize`, `\small`, ecc.) and line spacings are set proportionally. You can use any unit recognized by T_EX and you can omit the unit as well (in which case it defaults to pt). If `cloname= $\langle name \rangle$` and `fontsize= $\langle fontsize \rangle$` the generated file will be automatically used to setup the main sizes.



In fact the `.clo` file is only needed if you intend to modify it. In this case remember to comment the command, otherwise the edited file will be overwritten

```
\usepackage[cloname=fs,fontsize=11.5pt]{fontsize} % loads fs11.5pt.clo
\generateclofile{fs}[13.5pt]{11.5pt} % creates fs11.5pt.clo
```

`\printsamples`{ $\langle baselineskip \rangle$ }[$\langle fontsize \rangle$][$\langle sizes \rangle$] iff $\langle baselineskip \rangle \geq \langle fontsize \rangle$

A command thought to test the `fontsize` settings. It prints a text sample for every size given in the third optional argument. If this argument is omitted it prints a sample for each available size.

```
\printsamples{13pt}{11pt}[normalsize,normalsizerr,normalsizerrr]
\printsamples{13.5pt}{12pt}
```

2 New sizing commands

The packages provides three variants for each size bigger then `\normalsize`:

```
\normalsizer    \larger    \Larger    \LARGEr    \huger    \Huger  
\normalsizerr  \largerr  \Largerr  \LARGEerr  \hugerr  \Hugerr  
\normalsizerrr \largerrr \Largerrr \LARGEerrr \hugerrr \Hugerrr
```

3 Some text samples

Below you can see some text samples scaled proportionally to match the different values of the selected normal size and line spacing.

Text samples for 11pt on 13pt

`\normalsizer`: 11.55 pt on 13.63 pt. As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogsms of practical reason are what first give rise to the architectonic of practical reason. As will be shown, reason would be made to contradict.

`\normalsizerr`: 12.1 pt on 14.28 pt. As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogsms of practical reason are what first give rise to the architectonic of practical reason. As will be shown, reason would be made to contradict.

`\normalsizerrr`: 12.65 pt on 14.93 pt. As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogsms of practical reason are what first give rise to the architectonic of practical reason. As will be shown, reason would be made to contradict.

Text samples for 12pt on 13.5pt

`\large`: 14.4 pt on 16.27 pt. As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogsms of practical reason are what first give rise to the architectonic of practical reason. As will be shown, reason would be made to contradict.

`\larger`: 15.12 pt on 17.09 pt. As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogsms of practical reason are what first give rise to the architectonic of practical reason. As will be shown, reason would be made to contradict.

4 The Code



The parts added to the basic structure of `scrxextend` and `scrfont sizes` are highlighted in blue.

All the options of the package are defined via `xkeyval`, while `etoolbox` is required to execute `\AtEndOfPackage`. It is probably not necessary but for the moment I prefer to take advantage of it.

```
1 \ifpackageloaded{xkeyval}{\RequirePackage{xkeyval}}
2 \ifpackageloaded{etoolbox}{\RequirePackage{etoolbox}}
```

Here we define the only new package option `cloname`:

```
3 \DeclareOptionX{cloname}[custom]{\def\@fontsizefilebase{#1}}
```

Excerpt from `scrxextend.sty` Here the `scrxextend` code begins. Only a few names have been changed. The value of `\@fontsizefilebase` is set to `custom` instead of `scrszize`.

```
4 \DeclareOptionX{fontsize}[10]{%
5   \expandafter\@defaultunits\expandafter\@tempdima#1 pt\relax\@nnil
6   \edef\@tempa{#1}%
7   \setlength{\@tempdimb}{\@tempdima}%
8   \edef\@tempb{\strip@pt\@tempdimb}%
9   \addtolength{\@tempdimb}{-10\p@}%
10  \edef\@ptsize{\strip@pt\@tempdimb}%
11  \edef\@tempa{%
12    \noexpand\makeatletter
13    \noexpand\InputIfFileExists{\@fontsizefilebase\@tempa.clo}{%
14    \noexpand\PackageInfo{fontsize}{%
15      File ‘\@fontsizefilebase\@tempa.clo’ used to setup font sizes}%
16    }{%
17    \noexpand\InputIfFileExists{\@fontsizefilebase\@tempb pt.clo}{%
18    \noexpand\PackageInfo{fontsize}{%
19      File ‘\@fontsizefilebase\@tempb pt.clo’ used instead of%
20    \noexpand\MessageBreak
21      file ‘\@fontsizefilebase\@tempa.clo’ to setup font sizes}%
22    }{%
23    \noexpand\changefontsize{#1}%
24    }%
25  }%
26  \noexpand\catcode‘\noexpand\@=\the\catcode‘\@
27  }%
28  \expandafter\AtEndOfPackage\expandafter{\@tempa}%
29 }
```

Now we can execute and process the new options defined above. As `cloname` is responsible for defining `\@fontsizefilebase` it must precede `fontsize` which uses this command. The `\ctm@setlength` and `\changefontsize` commands are simply new names, respectively, for `\scr@setlength` and `\changefont sizes` used in `scrxextend.sty`.

```
30 \ExecuteOptionsX{cloname,fontsize}
31 \ProcessOptionsX*\relax
```

```

32 \newcommand*{\ctm@setlength[4]{%
33   \ifdim #2<\ifdim #2=\z@ \z@ \else \p@\fi
34   \ifdim #3<\ifdim #3=\z@ \z@ \else \p@\fi
35   \ifdim #4<\ifdim #4=\z@ \z@ \else \p@\fi
36   \setlength{#1}{\p@ \@plus\p@ \@minus\p@}%
37   \else
38   \setlength{#1}{\p@ \@plus\p@ \@minus#4}%
39   \fi
40   \else
41   \ifdim #4<\ifdim #4=\z@ \z@ \else \p@\fi
42   \setlength{#1}{\p@ \@plus#3 \@minus\p@}%
43   \else
44   \setlength{#1}{\p@ \@plus#3 \@minus#4}%
45   \fi
46   \fi
47   \else
48   \ifdim #3<\ifdim #3=\z@ \z@ \else \p@\fi
49   \ifdim #4<\ifdim #4=\z@ \z@ \else \p@\fi
50   \setlength{#1}{#2 \@plus\p@ \@minus\p@}%
51   \else
52   \setlength{#1}{#2 \@plus\p@ \@minus#4}%
53   \fi
54   \else
55   \ifdim #4<\ifdim #4=\z@ \z@ \else \p@\fi
56   \setlength{#1}{#2 \@plus#3 \@minus\p@}%
57   \else
58   \setlength{#1}{#2 \@plus#3 \@minus#4}%
59   \fi
60   \fi
61   \fi
62 }
63 \providecommand*{\changefontsize}[2][1.2\@tempdima]{%
64   \@defaultunits\@tempdima#2pt\relax\@nnil
65   \setlength{\@tempdimc}{\@tempdima}%
66   \addtolength{\@tempdimc}{-10\p@}%
67   \edef\@ptsize{\strip@pt\@tempdimc}%
68   \@defaultunits\@tempdimb#1pt\relax\@nnil
69   \setlength{\@tempdimc}{\dimexpr (100\@tempdimb / \@tempdima * \p@)}%
70   \edef\@tempb{\the\@tempdimc}%
71   \setlength{\@tempdimc}{\@tempdima}%
72   \def\@tempa##1##2##3##4##5\@nnil{\def##1{##2.##3##4}}%
73   \expandafter\@tempa\expandafter\@tempb\@tempb\@nnil%
74   \ctm@setlength{\abovedisplayskip}%
75   {.8333\@tempdimb}{.1667\@tempdimb}{.5\@tempdimb}%
76   \ctm@setlength{\abovedisplayshortskip}{\z@}{.25\@tempdimb}{\z@}%
77   \ctm@setlength{\belowdisplayshortskip}%
78   {.5\@tempdimb}{.25\@tempdimb}{.25\@tempdimb}%
79   \setlength{\belowdisplayskip}{\abovedisplayskip}%
80   \edef\normalsize{%
81     \noexpand\setfontsize\noexpand\normalsize
82     {\the\@tempdima}{\the\@tempdimb}%
83     \abovedisplayskip \the\abovedisplayskip
84     \abovedisplayshortskip \the\abovedisplayshortskip
85     \belowdisplayskip \the\belowdisplayskip

```

```

86   \belowdisplayskip \the\belowdisplayskip
87   \let\noexpand\@listi\noexpand\@listI
88 }%
89 \setlength{\@tempdima}{0.9125\@tempdimc}%
90 \setlength{\@tempdimb}{\@tempb\@tempdima}%
91 \ctm@setlength{\abovedisplayskip}%
92 {.8333\@tempdimb}{.1667\@tempdimb}{.5\@tempdimb}%
93 \ctm@setlength{\abovedisplayshortskip}{\z@}{.25\@tempdimb}{\z@}%
94 \ctm@setlength{\belowdisplayskip}%
95 {.5\@tempdimb}{.25\@tempdimb}{.25\@tempdimb}%
96 \setlength{\belowdisplayskip}{\abovedisplayskip}%
97 \edef\small{%
98   \noexpand\@setfontsize\noexpand\small
99   {\the\@tempdima}{\the\@tempdimb}%
100  \abovedisplayskip \the\abovedisplayskip
101  \abovedisplayshortskip \the\abovedisplayshortskip
102  \belowdisplayskip \the\belowdisplayskip
103  \belowdisplayshortskip \the\belowdisplayshortskip
104  \let\noexpand\@listi\noexpand\@listi@small
105 }%
106 \setlength{\@tempdima}{.83334\@tempdimc}%
107 \setlength{\@tempdimb}{\@tempb\@tempdima}%
108 \ctm@setlength{\abovedisplayskip}%
109 {.8333\@tempdimb}{.1667\@tempdimb}{.5\@tempdimb}%
110 \ctm@setlength{\abovedisplayshortskip}{\z@}{.25\@tempdimb}{\z@}%
111 \ctm@setlength{\belowdisplayskip}%
112 {.5\@tempdimb}{.25\@tempdimb}{.25\@tempdimb}%
113 \setlength{\belowdisplayskip}{\abovedisplayskip}%
114 \edef\footnotesize{%
115   \noexpand\@setfontsize\noexpand\footnotesize
116   {\the\@tempdima}{\the\@tempdimb}%
117   \abovedisplayskip \the\abovedisplayskip
118   \abovedisplayshortskip \the\abovedisplayshortskip
119   \belowdisplayskip \the\belowdisplayskip
120   \belowdisplayshortskip \the\belowdisplayshortskip
121   \let\noexpand\@listi\noexpand\@listi@footnotesize
122 }%
123 \setlength{\@tempdima}{.66667\@tempdimc}%
124 \setlength{\@tempdimb}{\@tempb\@tempdima}%
125 \edef\scriptsize{%
126   \noexpand\@setfontsize\noexpand\scriptsize
127   {\the\@tempdima}{\the\@tempdimb}%
128 }%
129 \setlength{\@tempdima}{.5\@tempdimc}%
130 \setlength{\@tempdimb}{\@tempb\@tempdima}%
131 \edef\tiny{%
132   \noexpand\@setfontsize\noexpand\tiny
133   {\the\@tempdima}{\the\@tempdimb}%
134 }%
135 \setlength{\@tempdima}{1.2\@tempdimc}%
136 \setlength{\@tempdimb}{\@tempb\@tempdima}%
137 \edef\large{%
138   \noexpand\@setfontsize\noexpand\large
139   {\the\@tempdima}{\the\@tempdimb}%

```



```

140 }%
141 \setlength{\@tempdima}{1.44\@tempdimc}%
142 \setlength{\@tempdimb}{\@tempb\@tempdima}%
143 \edef\Large{%
144   \noexpand\@setfontsize\noexpand\Large
145   {\the\@tempdima}{\the\@tempdimb}%
146 }%
147 \setlength{\@tempdima}{1.728\@tempdimc}%
148 \setlength{\@tempdimb}{\@tempb\@tempdima}%
149 \edef\LARGE{%
150   \noexpand\@setfontsize\noexpand\LARGE
151   {\the\@tempdima}{\the\@tempdimb}%
152 }%
153 \setlength{\@tempdima}{2.074\@tempdimc}%
154 \setlength{\@tempdimb}{\@tempb\@tempdima}%
155 \edef\huge{%
156   \noexpand\@setfontsize\noexpand\huge
157   {\the\@tempdima}{\the\@tempdimb}%
158 }%
159 \setlength{\@tempdima}{2.488\@tempdimc}%
160 \setlength{\@tempdimb}{\@tempb\@tempdima}%
161 \edef\Huge{%
162   \noexpand\@setfontsize\noexpand\Huge
163   {\the\@tempdima}{\the\@tempdimb}%
164 }%

```

Here we define some new font sizing commands. There are three variants for each standard command starting from `\normalsize` to `\Huge`: `\<cmd>r` > `\<cmd>rr` > `\<cmd>rrr`. Every level is scaled proportionally in order to preserve the default value of the corresponding standard command.

Definition of `\normalizer`, `\normalizerr`, `\normalizerrr`. Scale factor: 0.05.

```

165 \setlength{\@tempdima}{1.05\@tempdimc}%
166 \setlength{\@tempdimb}{\@tempb\@tempdima}%
167 \edef\normalizer{%
168   \noexpand\@setfontsize\noexpand\normalizer
169   {\the\@tempdima}{\the\@tempdimb}%
170 }%
171 \setlength{\@tempdima}{1.1\@tempdimc}%
172 \setlength{\@tempdimb}{\@tempb\@tempdima}%
173 \edef\normalizerr{%
174   \noexpand\@setfontsize\noexpand\normalizerr
175   {\the\@tempdima}{\the\@tempdimb}%
176 }%
177 \setlength{\@tempdima}{1.15\@tempdimc}%
178 \setlength{\@tempdimb}{\@tempb\@tempdima}%
179 \edef\normalizerrr{%
180   \noexpand\@setfontsize\noexpand\normalizerrr
181   {\the\@tempdima}{\the\@tempdimb}%
182 }%

```

Definition of \larger, \largerr, \largerrr. Scale factor: 0,06.

```
183 \setlength{\@tempdima}{1.26\@tempdimc}%
184 \setlength{\@tempdimb}{\@tempb\@tempdima}%
185 \edef\larger{%
186   \noexpand\@setfontsize\noexpand\larger
187   {\the\@tempdima}{\the\@tempdimb}%
188 }%
189 \setlength{\@tempdima}{1.32\@tempdimc}%
190 \setlength{\@tempdimb}{\@tempb\@tempdima}%
191 \edef\largerr{%
192   \noexpand\@setfontsize\noexpand\largerr
193   {\the\@tempdima}{\the\@tempdimb}%
194 }%
195 \setlength{\@tempdima}{1.38\@tempdimc}%
196 \setlength{\@tempdimb}{\@tempb\@tempdima}%
197 \edef\largerrr{%
198   \noexpand\@setfontsize\noexpand\largerrr
199   {\the\@tempdima}{\the\@tempdimb}%
200 }%
```

Definition of \Larger, \Largerr, \Largerrr. Scale factor: 0,072.

```
201 \setlength{\@tempdima}{1.512\@tempdimc}%
202 \setlength{\@tempdimb}{\@tempb\@tempdima}%
203 \edef\Larger{%
204   \noexpand\@setfontsize\noexpand\Larger
205   {\the\@tempdima}{\the\@tempdimb}%
206 }%
207 \setlength{\@tempdima}{1.584\@tempdimc}%
208 \setlength{\@tempdimb}{\@tempb\@tempdima}%
209 \edef\Largerr{%
210   \noexpand\@setfontsize\noexpand\Largerr
211   {\the\@tempdima}{\the\@tempdimb}%
212 }%
213 \setlength{\@tempdima}{1.656\@tempdimc}%
214 \setlength{\@tempdimb}{\@tempb\@tempdima}%
215 \edef\Largerrr{%
216   \noexpand\@setfontsize\noexpand\Largerrr
217   {\the\@tempdima}{\the\@tempdimb}%
218 }%
```

Definition of \LARGEr, \LARGEerr, \LARGEerrr. Scale factor: 0,0865.

```
219 \setlength{\@tempdima}{1.8145\@tempdimc}%
220 \setlength{\@tempdimb}{\@tempb\@tempdima}%
221 \edef\LARGEr{%
222   \noexpand\@setfontsize\noexpand\LARGEr
223   {\the\@tempdima}{\the\@tempdimb}%
224 }%
225 \setlength{\@tempdima}{1.901\@tempdimc}%
226 \setlength{\@tempdimb}{\@tempb\@tempdima}%
227 \edef\LARGEerr{%
228   \noexpand\@setfontsize\noexpand\LARGEerr
```

```

229   {\the\@tempdima}{\the\@tempdimb}%
230 }%
231 \setlength{\@tempdima}{1.9875\@tempdimc}%
232 \setlength{\@tempdimb}{\@tempb\@tempdima}%
233 \edef\LARGEerr{%
234   \noexpand\@setfontsize\noexpand\LARGEerr
235   {\the\@tempdima}{\the\@tempdimb}%
236 }%

```

Definition of \huger, \hugerr, \hugerrr. Scale factor: 0,1035.

```

237 \setlength{\@tempdima}{2.1775\@tempdimc}%
238 \setlength{\@tempdimb}{\@tempb\@tempdima}%
239 \edef\huger{%
240   \noexpand\@setfontsize\noexpand\huger
241   {\the\@tempdima}{\the\@tempdimb}%
242 }%
243 \setlength{\@tempdima}{2.281\@tempdimc}%
244 \setlength{\@tempdimb}{\@tempb\@tempdima}%
245 \edef\hugerr{%
246   \noexpand\@setfontsize\noexpand\hugerr
247   {\the\@tempdima}{\the\@tempdimb}%
248 }%
249 \setlength{\@tempdima}{2.3845\@tempdimc}%
250 \setlength{\@tempdimb}{\@tempb\@tempdima}%
251 \edef\hugerrr{%
252   \noexpand\@setfontsize\noexpand\hugerrr
253   {\the\@tempdima}{\the\@tempdimb}%
254 }%

```

Definition of \Huger, \Hugerr, \Hugerrr. Scale factor: 0.123.

```

255 \setlength{\@tempdima}{2.611\@tempdimc}%
256 \setlength{\@tempdimb}{\@tempb\@tempdima}%
257 \edef\Huger{%
258   \noexpand\@setfontsize\noexpand\Huger
259   {\the\@tempdima}{\the\@tempdimb}%
260 }%
261 \setlength{\@tempdima}{2.734\@tempdimc}%
262 \setlength{\@tempdimb}{\@tempb\@tempdima}%
263 \edef\Hugerr{%
264   \noexpand\@setfontsize\noexpand\Hugerr
265   {\the\@tempdima}{\the\@tempdimb}%
266 }%
267 \setlength{\@tempdima}{2.857\@tempdimc}%
268 \setlength{\@tempdimb}{\@tempb\@tempdima}%
269 \edef\Hugerrr{%
270   \noexpand\@setfontsize\noexpand\Hugerrr
271   {\the\@tempdima}{\the\@tempdimb}%
272 }%

273 \normalsize%

```

The KOMA files do not define `\parindent` and other lengths related to the page dimensions (`\textheight`, `\headheight`, `\headsep`, etc.) Anyway I think that some of these lengths are strictly linked to the font rather than to the page and text dimensions. Particularly `\headheight`, whose value may cause a well known warning if `fancyhdr` is loaded. So we define the following new lengths:

```
274 \setlength\parindent{\f@size pt}%
275 \setlength\headheight{\dimexpr(\f@size pt+2pt)}%
```

For these other lengths, all values are calculated proportionally to the main font. I took the `bk11.clo` file as a reference point. Note that the differences of these lengths in the files `bk10.clo` `bk11.clo` and `bk12.clo` only affect `\headsep`, `\topskip` and `\footskip`, which are not redefined here.

```
276 \setlength\smallskipamount{\dimexpr((\f@size pt+1pt)/4) \@plus 1\p@ \@minus 1\p@}%
277 \setlength\medskipamount{\dimexpr((\f@size pt+1pt)/2) \@plus 2\p@ \@minus 2\p@}%
278 \setlength\bigskipamount{\dimexpr(\f@size pt+1pt) \@plus 4\p@ \@minus 4\p@}%
```

The following table shows the values of some specific lengths defined by the package, relative to some significant settings of the main font and line spacing. The values are expressed in pt and rounded to the second decimal place.

Normal size	10	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11
Line spacing	12	12.12	12.24	12.36	12.48	12.6	12.72	12.84	12.96	13.08	13.2
<code>\headheight</code>	12	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	13
<code>\parindent</code>	10	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	11
<code>\bigskipamount ±4pt</code>	11	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	12
<code>\medskipamount ±2pt</code>	5.5	5.55	5.6	5.65	5.7	5.75	5.8	5.85	5.9	5.95	6
<code>\smallskipamount ±1pt</code>	2.75	2.78	2.8	2.82	2.85	2.88	2.9	2.93	2.95	2.98	3

```
279 \setlength{\@tempdimb}{\f@baselineskip}%
280 \ctm@setlength{\parsep}%
281 {.3333\@tempdimb}{.1667\@tempdimb}{.0833\@tempdimb}%
282 \ctm@setlength{\topsep}%
283 {.6667\@tempdimb}{.1667\@tempdimb}{.3333\@tempdimb}%
284 \@tempswafalse
285 \begingroup
286 \def\@list@extra{\aftergroup\@tempswatrue}%
287 \csname @listi\endcsname
288 \endgroup
289 \edef\@listi{\leftmargin\leftmarginI
290 \topsep \the\topsep
291 \parsep \the\parsep
292 \itemsep \parsep
293 \if@tempswa\noexpand\@list@extra\fi
294 }%
295 \let\@listI\@listi
296 \ctm@setlength{\parsep}%
297 {.1667\@tempdimb}{.0833\@tempdimb}{.0833\@tempdimb}%
298 \ctm@setlength{\topsep}%
299 {.3333\@tempdimb}{.1667\@tempdimb}{.1667\@tempdimb}%
300 \@tempswafalse
```

```

301 \begingroup
302 \def\@list@extra{\aftergroup\@tempwattrue}%
303 \csname @listi\endcsname
304 \endgroup
305 \edef\@listi@small{\leftmargin\leftmargini
306   \topsep \the\topsep
307   \parsep \the\parsep
308   \itemsep \parsep
309   \if@tempswa\noexpand\@list@extra\fi
310 }%
311 \ctm@setlength{\parsep}%
312 {.125\@tempdimb}{.0625\@tempdimb}{.0625\@tempdimb}%
313 \ctm@setlength{\topsep}%
314 {.25\@tempdimb}{.125\@tempdimb}{.125\@tempdimb}%
315 \@tempswafalse
316 \begingroup
317 \def\@list@extra{\aftergroup\@tempwattrue}%
318 \csname @listi\endcsname
319 \endgroup
320 \edef\@listi@footnotesize{\leftmargin\leftmargini
321   \topsep \the\topsep
322   \parsep \the\parsep
323   \itemsep \parsep
324   \if@tempswa\noexpand\@list@extra\fi
325 }%
326 \ctm@setlength{\parsep}%
327 {.1667\@tempdimb}{.0833\@tempdimb}{.0833\@tempdimb}%
328 \ctm@setlength{\topsep}%
329 {.3333\@tempdimb}{.1667\@tempdimb}{.0833\@tempdimb}%
330 \@tempswafalse
331 \begingroup
332 \def\@list@extra{\aftergroup\@tempwattrue}%
333 \csname @listii\endcsname
334 \endgroup
335 \edef\@listii{\leftmargin\leftmarginii
336   \labelwidth=\dimexpr \leftmargin-\labelsep
337   \topsep \the\topsep
338   \parsep \the\parsep
339   \itemsep \parsep
340   \if@tempswa\noexpand\@list@extra\fi
341 }%
342 \ctm@setlength{\topsep}%
343 {.1667\@tempdimb}{.0833\@tempdimb}{.0833\@tempdimb}%
344 \setlength{\partopsep}{\z@ \@plus\z@ \@minus\p@}%
345 \@tempswafalse
346 \begingroup
347 \def\@list@extra{\aftergroup\@tempwattrue}%
348 \csname @listiii\endcsname
349 \endgroup
350 \edef\@listiii{\leftmargin\leftmarginiii
351   \labelwidth=\dimexpr \leftmargin-\labelsep
352   \topsep \the\topsep
353   \parsep \z@
354   \partopsep \the\partopsep

```

```

355   \itemsep \topsep
356   \if@tempswa\noexpand\@list@extra\fi
357 }%
358 \@tempswafalse
359 \begingroup
360 \def\@list@extra{\aftergroup\@tempwattrue}%
361 \csname @listiv\endcsname
362 \endgroup
363 \edef\@listiv{\leftmargin\leftmarginiv
364   \labelwidth=\dimexpr \leftmargin-\labelsep\relax
365   \if@tempswa\noexpand\@list@extra\fi
366 }%
367 \@tempswafalse
368 \begingroup
369 \def\@list@extra{\aftergroup\@tempwattrue}%
370 \csname @listv\endcsname
371 \endgroup
372 \edef\@listv{\leftmargin\leftmarginv
373   \labelwidth=\dimexpr \leftmargin-\labelsep\relax
374   \if@tempswa\noexpand\@list@extra\fi
375 }%
376 \@tempswafalse
377 \begingroup
378 \def\@list@extra{\aftergroup\@tempwattrue}%
379 \csname @listvi\endcsname
380 \endgroup
381 \edef\@listvi{\leftmargin\leftmarginvi
382   \labelwidth=\dimexpr \leftmargin-\labelsep\relax
383   \if@tempswa\noexpand\@list@extra\fi
384 }%
385 \@listi
386 \setlength{\@tempdimb}{\f@baselineskip}%
387 \setlength{\footnotesep}{.555\@tempdimb}%
388 \ctm@setlength{\skip\footins}%
389 {.75\@tempdimb}{.3333\@tempdimb}{.1667\@tempdimb}%
390 \ctm@setlength{\floatsep}%
391 {\@tempdimb}{.1667\@tempdimb}{.1667\@tempdimb}%
392 \ctm@setlength{\textfloatsep}%
393 {1.6667\@tempdimb}{.1667\@tempdimb}{.3333\@tempdimb}%
394 \setlength{\intextsep}{\floatsep}%
395 \setlength{\dblfloatsep}{\floatsep}%
396 \setlength{\dbltextfloatsep}{\textfloatsep}%
397 \setlength{\@fptop}{\z@ \@plus 1fil}%
398 \setlength{\@fpsep}{.6667\@tempdimb \@plus 2fil}%
399 \setlength{\@fpbot}{\@fptop}%
400 \setlength{\@dblfpot}{\@fptop}%
401 \setlength{\@dblfpsep}{\@fpsep}%
402 \setlength{\@dblfpbot}{\@fptop}%
403 \ctm@setlength{\partopsep}{.2\@tempdimb}{.1\@tempdimb}{.1\@tempdimb}%
404 }

```

Excerpt from scrfontsizes.sty Here is a portion of the scrfontsizes package. It simply provides the `\generatecfile` command, without the KOMA-related definitions.

There are no reserved names for the .clo files. The command name is a new name for the KOMA \generatefontfile. In fact, what the command generates, is a .clo file.

```

405 \newcommand*\generateclofile[1]{%
406 \kernel@ifnextchar [{\@generatefontfile{#1}}{\@generatefontfile{#1}}%
407 }
408 \newcommand*\@generatefontfile{}
409 \def\@generatefontfile#1[#2]#3{%
410 \begingroup

```

At least starting with version 3.31 of the scrfontsizes package the code of the \@generatefontfile and @@generatefontfile commands sets the \parskip value to 0pt. We also use [#2] in place of [{#2}] for the optional argument of \changefontsize used immediately below.

```

411 \setlength{\parskip}{0pt}%
412 \changefontsize[#2]{#3}%
413 \generate@fontfile{#1}{#3}%
414 \endgroup
415 }
416 \newcommand\@@generatefontfile[2]{%
417 \begingroup
418 \setlength{\parskip}{0pt}%
419 \changefontsize{#2}%
420 \generate@fontfile{#1}{#2}%
421 \endgroup
422 }
423 \newcommand*\@@@generatefontfile[2][{}]{%
424 \newcommand*\@fontfile{}
425 \let\@fontfile\@mainaux
426 \newcommand*\generate@fontfile[2]{%
427 \def\@ind{\space\space}%
428 \immediate\openout\@fontfile #1#2.clo
429 \immediate\write\@fontfile{\@percentchar^^J%
430 \@percentchar\space This is file '#1#2.clo', generated with^^J%

```

In the next three lines we only replace 'scrfontsizes' with 'fontsize' and 'Markus Kohm' with 'Ivan Valbusa', in order to get the correct informations in the .log file.

```

431 \@percentchar\space fontsize
432 \csname ver@fontsize.\@pkgextension\endcsname,^^J%
433 \@percentchar\space Copyright (c) Ivan Valbusa.^^J%
434 \@percentchar^^J%
435 \string\ProvidesFile{#1#2.clo}]%
436 \the\year/\ifnum\month<10 0\fi\the\month/\ifnum\day<10 0\fi\the\day%
437 \space generated font size class option (#2)]}%
438 \immediate\write\@fontfile{%
439 \string\def\string\normalsize{\@percentchar^^J%
440 \@ind\string\@setfontsize\string\normalsize{\f@size}{\f@baselineskip}%
441 \@percentchar^^J%
442 \@ind\string\abovedisplayskip\space \the\abovedisplayskip^^J%
443 \@ind\string\abovedisplayshortskip\space \the\abovedisplayshortskip^^J%
444 \@ind\string\belowdisplayskip\space \the\belowdisplayskip^^J%
445 \@ind\string\belowdisplayshortskip\space \the\belowdisplayshortskip^^J%
446 \@ind\string\let\string\@listi\string\@listI^^J%
447 }\@percentchar%

```

```

448 }%
449 \begingroup\small\@listi
450 \immediate\write\@fontfile{%
451   \string\def\string\small{\@percentchar^^J%
452     \@ind\string\@setfontsize\string\small{\f@size}{\f@baselineskip}%
453     \@percentchar^^J%
454     \@ind\string\abovedisplayskip\space \the\abovedisplayskip^^J%
455     \@ind\string\abovedisplayshortskip\space \the\abovedisplayshortskip^^J%
456     \@ind\string\belowdisplayskip\space \the\belowdisplayskip^^J%
457     \@ind\string\belowdisplayshortskip\space \the\belowdisplayshortskip^^J%
458     \@ind\string\def\string\@listi{\@percentchar^^J%
459       \@ind\@ind\string\leftmargin\string\leftmargini^^J%
460       \@ind\@ind\string\topsep \the\topsep^^J%
461       \@ind\@ind\string\parsep \the\parsep^^J%
462       \@ind\@ind\string\itemsep \string\parsep^^J%
463       \@ind}\@percentchar^^J%
464   }\@percentchar%
465 }%
466 \endgroup
467 \begingroup\footnotesize\@listi
468 \immediate\write\@fontfile{%
469   \string\def\string\footnotesize{\@percentchar^^J%
470     \@ind\string\@setfontsize\string\footnotesize{\f@size}{\f@baselineskip}%
471     \@percentchar^^J%
472     \@ind\string\abovedisplayskip\space \the\abovedisplayskip^^J%
473     \@ind\string\abovedisplayshortskip\space \the\abovedisplayshortskip^^J%
474     \@ind\string\belowdisplayskip\space \the\belowdisplayskip^^J%
475     \@ind\string\belowdisplayshortskip\space \the\belowdisplayshortskip^^J%
476     \@ind\string\def\string\@listi{\@percentchar^^J%
477       \@ind\@ind\string\leftmargin\string\leftmargini^^J%
478       \@ind\@ind\string\topsep \the\topsep^^J%
479       \@ind\@ind\string\parsep \the\parsep^^J%
480       \@ind\@ind\string\itemsep \string\parsep^^J%
481       \@ind}\@percentchar^^J%
482   }\@percentchar%
483 }%
484 \endgroup
485 \begingroup\scriptsize
486 \immediate\write\@fontfile{%
487   \string\def\string\scriptsize{%
488     \string\@setfontsize\string\scriptsize{\f@size}{\f@baselineskip}%
489   }\@percentchar%
490 }%
491 \endgroup
492 \begingroup\tiny
493 \immediate\write\@fontfile{%
494   \string\def\string\tiny{%
495     \string\@setfontsize\string\tiny{\f@size}{\f@baselineskip}%
496   }\@percentchar%
497 }%
498 \endgroup
499 \begingroup\large
500 \immediate\write\@fontfile{%
501   \string\def\string\large{%

```



```

502 \string\@setfontsize\string\large{\f@size}{\f@baselineskip}%
503 }\@percentchar%
504 }%
505 \endgroup
506 \begingroup\Large
507 \immediate\write\@fontfile{%
508 \string\def\string\Large{%
509 \string\@setfontsize\string\Large{\f@size}{\f@baselineskip}%
510 }\@percentchar%
511 }%
512 \endgroup
513 \begingroup\LARGE
514 \immediate\write\@fontfile{%
515 \string\def\string\LARGE{%
516 \string\@setfontsize\string\LARGE{\f@size}{\f@baselineskip}%
517 }\@percentchar%
518 }%
519 \endgroup
520 \begingroup\huge
521 \immediate\write\@fontfile{%
522 \string\def\string\huge{%
523 \string\@setfontsize\string\huge{\f@size}{\f@baselineskip}%
524 }\@percentchar%
525 }%
526 \endgroup
527 \begingroup\Huge
528 \immediate\write\@fontfile{%
529 \string\def\string\Huge{%
530 \string\@setfontsize\string\Huge{\f@size}{\f@baselineskip}%
531 }\@percentchar%
532 }%
533 \endgroup

```

The new sizing commands previously defined are recalled here and written in the .clo file if the `\generateclofile` command is used.

```

534 \begingroup\normalsizer
535 \immediate\write\@fontfile{%
536 \string\def\string\normalsizer{%
537 \string\@setfontsize\string\normalsizer{\f@size}{\f@baselineskip}%
538 }\@percentchar%
539 }%
540 \endgroup
541 \begingroup\normalsizerr
542 \immediate\write\@fontfile{%
543 \string\def\string\normalsizerr{%
544 \string\@setfontsize\string\normalsizerr{\f@size}{\f@baselineskip}%
545 }\@percentchar%
546 }%
547 \endgroup
548 \begingroup\normalsizerrr
549 \immediate\write\@fontfile{%
550 \string\def\string\normalsizerrr{%
551 \string\@setfontsize\string\normalsizerrr{\f@size}{\f@baselineskip}%

```

```

552   }\@percentchar%
553 }%
554 \endgroup
555 \begingroup\larger
556 \immediate\write\@fontfile{%
557   \string\def\string\larger{%
558     \string\@setfontsize\string\larger{\f@size}{\f@baselineskip}%
559   }\@percentchar%
560 }%
561 \endgroup
562 \begingroup\largerr
563 \immediate\write\@fontfile{%
564   \string\def\string\largerr{%
565     \string\@setfontsize\string\largerr{\f@size}{\f@baselineskip}%
566   }\@percentchar%
567 }%
568 \endgroup
569 \begingroup\largerrr
570 \immediate\write\@fontfile{%
571   \string\def\string\largerrr{%
572     \string\@setfontsize\string\largerrr{\f@size}{\f@baselineskip}%
573   }\@percentchar%
574 }%
575 \endgroup
576 \begingroup\Large
577 \immediate\write\@fontfile{%
578   \string\def\string\Large{%
579     \string\@setfontsize\string\Large{\f@size}{\f@baselineskip}%
580   }\@percentchar%
581 }%
582 \endgroup
583 \begingroup\Larger
584 \immediate\write\@fontfile{%
585   \string\def\string\Larger{%
586     \string\@setfontsize\string\Larger{\f@size}{\f@baselineskip}%
587   }\@percentchar%
588 }%
589 \endgroup
590 \begingroup\Largerr
591 \immediate\write\@fontfile{%
592   \string\def\string\Largerr{%
593     \string\@setfontsize\string\Largerr{\f@size}{\f@baselineskip}%
594   }\@percentchar%
595 }%
596 \endgroup
597 \begingroup\Largerrr
598 \immediate\write\@fontfile{%
599   \string\def\string\Largerrr{%
600     \string\@setfontsize\string\Largerrr{\f@size}{\f@baselineskip}%
601   }\@percentchar%
602 }%
603 \begingroup\LARGER
604 \immediate\write\@fontfile{%
605   \string\def\string\LARGER{%

```

```

606     \string\@setfontsize\string\LARGE{\f@size}{\f@baselineskip}%
607   }\@percentchar%
608 }%
609 \endgroup
610 \begingroup\LARGEerr
611 \immediate\write\@fontfile{%
612   \string\def\string\LARGEerr{%
613     \string\@setfontsize\string\LARGEerr{\f@size}{\f@baselineskip}%
614   }\@percentchar%
615 }%
616 \endgroup
617 \begingroup\LARGEerrr
618 \immediate\write\@fontfile{%
619   \string\def\string\LARGEerrr{%
620     \string\@setfontsize\string\LARGEerrr{\f@size}{\f@baselineskip}%
621   }\@percentchar%
622 }%
623 \begingroup\huger
624 \immediate\write\@fontfile{%
625   \string\def\string\huger{%
626     \string\@setfontsize\string\huger{\f@size}{\f@baselineskip}%
627   }\@percentchar%
628 }%
629 \endgroup
630 \begingroup\hugerr
631 \immediate\write\@fontfile{%
632   \string\def\string\hugerr{%
633     \string\@setfontsize\string\hugerr{\f@size}{\f@baselineskip}%
634   }\@percentchar%
635 }%
636 \endgroup
637 \begingroup\hugerrr
638 \immediate\write\@fontfile{%
639   \string\def\string\hugerrr{%
640     \string\@setfontsize\string\hugerrr{\f@size}{\f@baselineskip}%
641   }\@percentchar%
642 }%
643 \begingroup\Huger
644 \immediate\write\@fontfile{%
645   \string\def\string\Huger{%
646     \string\@setfontsize\string\Huger{\f@size}{\f@baselineskip}%
647   }\@percentchar%
648 }%
649 \endgroup
650 \begingroup\Hugerr
651 \immediate\write\@fontfile{%
652   \string\def\string\Hugerr{%
653     \string\@setfontsize\string\Hugerr{\f@size}{\f@baselineskip}%
654   }\@percentchar%
655 }%
656 \endgroup
657 \begingroup\Hugerrr
658 \immediate\write\@fontfile{%
659   \string\def\string\Hugerrr{%

```

```

660     \string\@setfontsize\string\Hugerrr{\f@size}{\f@baselineskip}%
661   }\@percentchar%
662 }%

```

```

663 \immediate\write\@fontfile{\string\normalsize}%

```

The new lengths previously defined are recalled here and written in the .clo file if the \generateclofile command is used.

```

664 \begingroup
665 \immediate\write\@fontfile{%
666   \string\setlength{\string\parindent}{\the\parindent}^^J%
667   \string\setlength{\string\headheight}{\the\headheight}^^J%
668   \string\setlength{\string\smallskipamount}{\the\smallskipamount}^^J%
669   \string\setlength{\string\medskipamount}{\the\medskipamount}^^J%
670   \string\setlength{\string\bigskipamount}{\the\bigskipamount}^^J%
671 }%
672 \endgroup

673 \immediate\write\@fontfile{%
674   \string\setlength{\string\footnotesep}{\the\footnotesep}\@percentchar
675 }%
676 \immediate\write\@fontfile{%
677   \string\setlength{\string\skip\string\footins}{\the\skip\footins}\@percentchar
678 }%
679 \immediate\write\@fontfile{%
680   \string\setlength{\string\floatsep}{\the\floatsep}\@percentchar
681 }%
682 \immediate\write\@fontfile{%
683   \string\setlength{\string\textfloatsep}{\the\textfloatsep}\@percentchar
684 }%
685 \immediate\write\@fontfile{%
686   \string\setlength{\string\intextsep}{\the\intextsep}\@percentchar
687 }%
688 \immediate\write\@fontfile{%
689   \string\setlength{\string\dblfloatsep}{\the\dblfloatsep}\@percentchar
690 }%
691 \immediate\write\@fontfile{%
692   \string\setlength{\string\dbltextfloatsep}{\the\dbltextfloatsep}\@percentchar
693 }%
694 \immediate\write\@fontfile{%
695   \string\setlength{\string\@fptop}{\the\@fptop}\@percentchar
696 }%
697 \immediate\write\@fontfile{%
698   \string\setlength{\string\@fpsep}{\the\@fpsep}\@percentchar
699 }%
700 \immediate\write\@fontfile{%
701   \string\setlength{\string\@fpbot}{\the\@fpbot}\@percentchar
702 }%
703 \immediate\write\@fontfile{%
704   \string\setlength{\string\@dblftop}{\the\@dblftop}\@percentchar
705 }%
706 \immediate\write\@fontfile{%
707   \string\setlength{\string\@dblfpsep}{\the\@dblfpsep}\@percentchar

```

```

708 }%
709 \immediate\write\@fontfile{%
710   \string\setlength{\string\@dblfpbot}{\the\@dblfpbot}\@percentchar
711 }%
712 \immediate\write\@fontfile{%
713   \string\setlength{\string\partopsep}{\the\partopsep}\@percentchar
714 }%
715 \begingroup
716 \@listi
717 \immediate\write\@fontfile{%
718   \string\def\string\@listi{\@percentchar^^J%
719     \@ind\string\leftmargin\string\leftmarginii^^J%
720     \@ind\string\topsep \the\topsep^^J%
721     \@ind\string\parsep \the\parsep^^J%
722     \@ind\string\itemsep \string\parsep^^J%
723   }\@percentchar
724 }%
725 \endgroup
726 \immediate\write\@fontfile{%
727   \string\let\string\@listI\string\@listi
728 }%
729 \begingroup
730 \@listii
731 \immediate\write\@fontfile{%
732   \string\def\string\@listii{\@percentchar^^J%
733     \@ind\string\leftmargin\string\leftmarginiii^^J%
734     \@ind\string\labelwidth\string\leftmarginiii^^J%
735     \@ind\string\advance\string\labelwidth-\string\labelsep^^J%
736     \@ind\string\topsep \the\topsep^^J%
737     \@ind\string\parsep \the\parsep^^J%
738     \@ind\string\itemsep \string\parsep^^J%
739   }\@percentchar
740 }%
741 \endgroup
742 \begingroup
743 \@listiii
744 \immediate\write\@fontfile{%
745   \string\def\string\@listiii{\@percentchar^^J%
746     \@ind\string\leftmargin\string\leftmarginiiii^^J%
747     \@ind\string\labelwidth\string\leftmarginiiii^^J%
748     \@ind\string\advance\string\labelwidth-\string\labelsep^^J%
749     \@ind\string\topsep \the\topsep^^J%
750     \@ind\string\parsep \the\parsep^^J%
751     \@ind\string\partopsep \the\partopsep^^J%
752     \@ind\string\itemsep \string\topsep^^J%
753   }\@percentchar
754 }%
755 \endgroup
756 \begingroup
757 \@listiv
758 \immediate\write\@fontfile{%
759   \string\def\string\@listiv{\@percentchar^^J%
760     \@ind\string\leftmargin\string\leftmarginiv^^J%
761     \@ind\string\labelwidth\string\leftmarginiv^^J%

```

```

762 \@ind\string\advance\string\labelwidth-\string\labelsep^^J%
763 }\@percentchar
764 }%
765 \endgroup
766 \begingroup
767 \@listv
768 \immediate\write\@fontfile{%
769 \string\def\string\@listv{\@percentchar^^J%
770 \@ind\string\leftmargin\string\leftmarginv^^J%
771 \@ind\string\labelwidth\string\leftmarginv^^J%
772 \@ind\string\advance\string\labelwidth-\string\labelsep^^J%
773 }\@percentchar
774 }%
775 \endgroup
776 \begingroup
777 \@listvi
778 \immediate\write\@fontfile{%
779 \string\def\string\@listvi{\@percentchar^^J%
780 \@ind\string\leftmargin\string\leftmarginvi^^J%
781 \@ind\string\labelwidth\string\leftmarginvi^^J%
782 \@ind\string\advance\string\labelwidth-\string\labelsep^^J%
783 }\@percentchar
784 }%
785 \endgroup
786 \immediate\write\@fontfile{%
787 \string\@ifundefined{\list@extra}{\@percentchar^^J%
788 \string\expandafter\string\ifnum\string\scr@v@is@ge{3.17}%
789 \string\par@updaterelative\string\fi^^J%
790 \@ind\string\l@addto@macro{\string\@listi}{\string\@list@extra}%
791 \@percentchar^^J%
792 \@ind\string\let\string\@listI=\string\@listi^^J%
793 \@ind\string\l@addto@macro{\string\@listii}{\string\@list@extra}%
794 \@percentchar^^J%
795 \@ind\string\l@addto@macro{\string\@listiii}{\string\@list@extra}%
796 \@percentchar^^J%
797 \@ind\string\l@addto@macro{\string\footnotesize}{\string\protect
798 \string\add@extra@listi{ftns}}\@percentchar^^J%
799 \@ind\string\l@addto@macro{\string\small}{\string\protect
800 \string\add@extra@listi{sml}}\@percentchar^^J%
801 }\@percentchar^^J%
802 \string\@listi^^J%
803 \string\endinput^^J%
804 \@percentchar^^J%
805 \@percentchar\space End of file '#1#2.clo'.
806 }
807 \immediate\closeout\@fontfile
808 }
809 \@onlypreamble\generateclofile

```

We will now define some internal commands to test the package functions.

```

810 \ExplSyntaxOn
811
812 \NewExpandableDocumentCommand{\getlength}{0{5}m}

```

```

813 {
814   \fp_eval:n { round(#2,#1) }
815 }
816
817 \ExplSyntaxOff
818 \def\fontsize@lipsum{As any dedicated reader can clearly see, the Ideal of
819 practical reason is a representation of, as far as I know, the
820 things in themselves; as I have shown elsewhere, the phenomena
821 should only be used as a canon for our understanding. The paralogisms
822 of practical reason are what first give rise to the architectonic of
823 practical reason. As will be shown, reason would
824 be made to contradict.}
825 \chardef\fsbslash='\'
826 % Thanks to @Werner (https://tex.stackexchange.com/a/87423/231952)
827 \newcommand{\sizesamples}[1]{%
828   \def\nextitem{\par}% Separator
829   \renewcommand*\do}[1]{\nextitem\bgroup\csname##1\endcsname
830     \noindent{\csname ##1\endcsname \texttt{\fsbslash ##1}:
831       \getlength[2]{\f@size}\,pt on \getlength[2]{\the\baselineskip}\,pt.} \fontsize@lipsum\par
832   }% How to process each item
833   \docsvlist{#1}% Process list
834 }
835 \NewDocumentCommand \printsamples { m m O{
836   normalsize,normalsizer,normalsizerr,normalsizerrr,
837   large,larger,largerr,largerrr,
838   Large,Larger,Largerr,Largerrr,
839   LARGE,LARGEr,LARGEerr,LARGEerrr,
840   huge,huger,hugerr,hugerrr,
841   Huge,Huger,Hugerr,Hugerrr} }
842 {
843   \changefontsize[#1]{#2}
844   \subsubsection*{Text samples for #2 on #1}
845   \sizesamples{#3}
846 }

```

References

- Adriaens, Hendri (2014), *The xkeyval package. Extension of the keyval package*, version 2.7a, <http://www.ctan.org/pkg/xkeyval> (visited on 07/05/2020).
- Lehman, Philipp and Joseph Wright (2019), *The etoolbox Package. An e-TeX Toolbox for Class and Package Authors*, version 2.5h, <http://www.ctan.org/pkg/etoolbox> (visited on 07/05/2020).
- Neukam, Frank, Markus Kohm, and Axel Kielhorn (2020), *KOMA – Script. A versatile L^AT_EX 2_ε bundle*, version 3.30, <http://www.ctan.org/pkg/koma-script> (visited on 07/05/2020).

Change History

v0.1	v0.2
General: First public release 1	General: Updated documentation and code comments. 1

v0.3	documentation. 1
General: Added definitions of some lengths omitted from KOMA-script files: <code>\smallskiamount</code> , <code>\medskiamount</code> , <code>\bigskiamount</code> . Redefined <code>\parindent</code> and <code>\headheight</code> 1	v0.5
	General: New font sizing commands <code>\langle cmdname \rangle r</code> , <code>\langle cmdname \rangle rr</code> , <code>\langle cmdname \rangle rrr</code> . New command <code>\printsamples</code> . Updated documentation. 1
v0.4	
General: Maintenance release. Updated	

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